

Amendments to the Claims:

The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): Water-in-oil micro-emulsion, with binary phase differentiability and active substance differentiability, wherein it is free of cross-linking agents and comprises

- a) 45 to 90 wt.-% of a liquid oil phase;
- b) 5 to 40 wt.-% of a mixture of one or more W/O and one or more O/W surfactants, in a ratio of 1:4 to 1:1.2;
- c) 0.01 to 20 wt.-% of one or more emulsifiers;
- d) 0.00 to 15 wt.-% of at least one alcohol selected from the group consisting of ~~or more~~ monovalent ~~or bivalent~~ C1-8 alcohols, hexane diol, and octane diol;

e) 1 to 10 wt.-% water or aqueous solutions,
~~whereby~~ wherein the micelles of this primary micro-emulsion have a particle size of 20 to 400 nm, and the emulsion ~~can be optionally converted~~ is convertible to a secondary W/O micro-emulsion or an O/W micro-emulsion, by means of reaction with an aqueous phase.

Claim 2 (previously presented): Water-in-oil micro-emulsion as recited in claim 1, wherein it contains 0 to 30 wt.-% of one or more active substances soluble in water or soluble in fat, or mixtures of active substances soluble in water and soluble in fat.

Claim 3 (previously presented): Water-in-oil micro-emulsion as recited in claim 1, wherein in addition, 0 to 15 wt.-% additives are present.

Claim 4 (currently amended): Water-in-oil micro-emulsion as recited in claim 1, wherein it contains

- a) 50 to 80 wt.-% of an oil phase;
- b) 5 to 40 wt.-% of a mixture of one or more W/O and one or more O/W surfactants;
- c) 0.1 to 10 wt.-% of one or more lecithins, phosphatidylcholines, ~~or derivatives~~ or mixtures thereof as an emulsifier;
- d) 0.0 to 10 wt.-% of at least one alcohol selected from the group consisting of ~~or more monovalent or bivalent~~ C1-8 alcohols, hexane diol, and octane diol;
- e) 1 to 10 wt.-% water or aqueous solutions.

Claim 5 (previously presented): Water-in-oil micro-emulsion as recited in claim 1, wherein it contains 0.01 to 15 wt.-% alcohol.

Claim 6 (previously presented): Water-in-oil micro-emulsion as recited in claim 1, wherein the W/O surfactant(s) is/are non-ionic and have an HLB value of 3 to 7, and that the O/W surfactant(s) is/are non-ionic and have an HLB value of 9 to 18.

Claim 7 (currently amended): Water-in-oil micro-emulsion as recited in claim ~~1~~ 4, wherein the lecithin, or phosphatidyl choline ~~or derivative thereof~~ is selected from ~~among the group consisting of~~ phosphatidyl choline, soy lecithin, egg lecithin, mixtures of phosphatidyl choline and lecithin in various proportions, ~~or~~ and mixtures thereof.

Claim 8 (currently amended): Water-in-oil micro-emulsion as recited in claim 1, wherein the alcohol is selected from ~~among the group consisting of~~ ethanol, isopropanol, butanol, ~~1,6-octane~~ octane diol, and ~~1,2-hexane~~ hexane diol.

Claim 9 (currently amended): Water-in-oil micro-emulsion as recited in claim 1, ~~wherein it contains~~ further comprising water-soluble active substances, which are selected from ~~among~~ the group consisting of amino acids, peptides, protein hydrolysates, proteins, saccharides, oligosaccharides, polysaccharides ~~and derivatives~~, hormones and substances similar to hormones, antioxidants, vitamins and pro-vitamins, AHA acids, NMF, oxidants, plant extracts, flavonoids, and plant polyphenols ~~or~~ and mixtures thereof.

Claim 10 (currently amended): Water-in-oil micro-emulsion as recited in claim 1, ~~wherein it contains~~ further comprising fat-soluble active ingredients that are selected from ~~among~~ the group consisting of antioxidants, vitamins and pro-vitamins, unsaturated fatty acids, ceramides, ether oils ~~or~~ and mixtures thereof.

Claim 11 (currently amended): Water-in-oil micro-emulsion as recited in claim 1, ~~wherein it~~ further comprising dermatologically effective agents, selected from ~~among~~ the group consisting of hormones and substances similar to hormones, antimycotics, scar treatment agents, tanning agents, tars,

keratinolytics, keratinoplastics, photocumarins, acelainic acid ~~or~~ and mixtures thereof.

Claim 12 (currently amended): Water-in-oil micro-emulsion as recited in claim 1, ~~wherein~~ further comprising additives selected from the group consisting of electrolytes, oxidants, chelating substances, diffusion reinforcing agents, penetration promoting agents, moisturizers ~~or~~ and mixtures thereof ~~are contained as additives.~~

Claim 13 (currently amended): Water-in-oil micro-emulsion as recited in claim 1, ~~wherein it contains~~ further comprising biological oxygen carriers, selected from ~~among~~ the group consisting of native, modified, ~~or~~ and non-modified hemoglobin, myoglobin, ~~or~~ and mixtures thereof, in a total amount of 0.001 to 20 wt.-%.

Claim 14 (previously presented): Water-in-oil micro-emulsion as recited in claim 13, wherein it furthermore contains antioxidants, glutathione, super-oxide dismutase, melatonin, flavonoids, amino acids or mixtures thereof.

Claim 15 (previously presented): Water-in-oil micro-emulsion as recited in claim 13, wherein it furthermore contains glucose.

Claim 16 (previously presented): Water-in-oil micro-emulsion as recited in claim 1, wherein it additionally contains vitamins and pro-vitamins in an amount of 0.01 to 1.0 wt.-%.

Claim 17 (previously presented): Water-in-oil micro-emulsion as recited in claim 1, wherein it contains plant extracts in an amount of 0.1 wt.-% to 5 wt.-%, 0.1 wt.-% to 5 wt.-% ether oils, 0.1 wt.-% to 10 wt.-% AHA acids, 0.01 to 0.3 wt.-% hormones or substances similar to hormones, 0.1 to 5 wt.-% essential fatty acids, ceramides, or mixtures thereof.

Claim 18 (currently amended): ~~Topically~~ A topically applicable preparation in the form of comprising a mixture of a primary micro-emulsion having binary phase differentiability and active substance differentiability and being free of cross-linking agents, the micro-emulsion comprising a) 45 to 90 wt.-% of a liquid oil phase; b) 5 to 40 wt.-% of a mixture of one or more W/O and one or more O/W surfactants, in a ratio of

1:4 to 1:1.2; c) 0.01 to 20 wt.-% of one or more emulsifiers;
d) 0.00 to 15 wt.-% of at least one alcohol selected from the
group consisting of monovalent C1-8 alcohols, hexane diol, and
octane diol; and e) 1 to 10 wt.-% water or aqueous solutions,
wherein the micelles of this primary micro-emulsion have a
particle size of 20 to 400 nm, wherein it represents a
composition as recited in claim 1, or a mixture thereof with 0.1
to 90 wt.-% of an aqueous phase, whereby the preparation then
contains containing 1 to 50 wt.-% of the an oil phase and forming
a W/O micro-emulsion or an O/W micro-emulsion.

Claim 19 (previously presented): Method for the production of a micro-emulsion as recited in claim 1, wherein the oil phase, if applicable with fat-soluble active substances contained in it, containing the surfactant(s), the emulsifier(s), as well as the alcohol(s) and, if applicable, additives, and an aqueous phase, and, if applicable, the water-soluble active substance(s), if applicable additives, are mixed with one another at temperatures from 10 to 30°C, and the primary W/O micro-emulsion obtained in this manner is converted to a secondary W/O micro-emulsion or a secondary O/W micro-emulsion, if necessary with an aqueous phase that can contain additional water-soluble active substances, if applicable, and additives, if applicable.

Claim 20 (canceled).

Claim 21 (currently amended): ~~Use~~ The method as recited in claim ~~20~~ 24, wherein skin that has been irritated or changed due to age is treated.

Claim 22 (currently amended): ~~Use~~ The method as recited in claim 21, wherein ~~a preparation is used~~ the micro-emulsion comprises 0 to 30 wt.-% of one or more active substances soluble in water or soluble in fat, or mixtures of active substances soluble in water and soluble in fat.

Claim 23 (currently amended): ~~Use~~ The method as recited in claim ~~20~~ 24, wherein the ~~emulsion~~ preparation is liquid and is sprayed on or applied as a gel.

Claim 24 (new): A method for topically treating skin that has been irritated or damaged or has degenerated due to allergy, bacteria, immunology, or external influences comprising the steps of:

providing a cosmetic, dermatological, pharmaceutical preparation comprising a water-in-oil micro-emulsion having binary phase differentiability and active substance differentiability and being free of cross-linking agents, the micro-emulsion comprising a) 45 to 90 wt.-% of a liquid oil phase; b) 5 to 40 wt.-% of a mixture of one or more W/O and one or more O/W surfactants, in a ratio of 1:4 to 1:1.2; c) 0.01 to 20 wt.-% of one or more emulsifiers; d) 0.00 to 15 wt.-% of at least one alcohol selected from the group consisting of monovalent C1-8 alcohols, hexane diol, and octane diol; and e) 1 to 10 wt.-% water or aqueous solutions, wherein the micelles of this primary micro-emulsion have a particle size of 20 to 400 nm and the emulsion is convertible to a secondary W/O micro-emulsion or an O/W micro-emulsion, by means of reaction with an aqueous phase; and

applying the preparation topically to a person's skin.

Claim 25 (new): A cosmetic, dermatological, pharmaceutical preparation for topically treating skin that has been irritated or damaged or has degenerated due to allergy, bacteria, immunology, or external influences comprising a water-in-oil micro-emulsion having binary phase differentiability and active substance differentiability and being free of cross-linking

agents, the micro-emulsion comprising a) 45 to 90 wt.-% of a liquid oil phase; b) 5 to 40 wt.-% of a mixture of one or more W/O and one or more O/W surfactants, in a ratio of 1:4 to 1:1.2; c) 0.01 to 20 wt.-% of one or more emulsifiers; d) 0.00 to 15 wt.-% of at least one alcohol selected from the group consisting of monovalent C1-8 alcohols, hexane diol, and octane diol; and e) 1 to 10 wt.-% water or aqueous solutions, wherein the micelles of this primary micro-emulsion have a particle size of 20 to 400 nm and the emulsion is convertible to a secondary W/O micro-emulsion or an O/W micro-emulsion, by means of reaction with an aqueous phase.

Claim 26 (new): A method for treating and caring of hair comprising the steps of:

providing a preparation comprising a water-in-oil micro-emulsion having binary phase differentiability and active substance differentiability and being free of cross-linking agents, the micro-emulsion comprising a) 45 to 90 wt.-% of a liquid oil phase; b) 5 to 40 wt.-% of a mixture of one or more W/O and one or more O/W surfactants, in a ratio of 1:4 to 1:1.2; c) 0.01 to 20 wt.-% of one or more emulsifiers; d) 0.00 to 15 wt.-% of at least one alcohol selected from the group consisting of monovalent C1-8 alcohols, hexane diol, and octane diol; and e)

1 to 10 wt.-% water or aqueous solutions, wherein the micelles of this primary micro-emulsion have a particle size of 20 to 400 nm and the emulsion is convertible to a secondary W/O micro-emulsion or an O/W micro-emulsion, by means of reaction with an aqueous phase; and

applying the preparation to a person's hair.

Claim 27 (new): A topically applicable preparation comprising a primary micro-emulsion having binary phase differentiability and active substance differentiability and being free of cross-linking agents, the micro-emulsion comprising a) 45 to 90 wt.-% of a liquid oil phase; b) 5 to 40 wt.-% of a mixture of one or more W/O and one or more O/W surfactants, in a ratio of 1:4 to 1:1.2; c) 0.01 to 20 wt.-% of one or more emulsifiers; d) 0.00 to 15 wt.-% of at least one alcohol selected from the group consisting of monovalent C1-8 alcohols, hexane diol, and octane diol; and e) 1 to 10 wt.-% water or aqueous solutions, wherein the micelles of this primary micro-emulsion have a particle size of 20 to 400 nm.